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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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02/13/2004

Nam-il Kim

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10/26/2007

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EXAMINER

PRABHAKHER, PRITHAM DAVID

ART UNIT

PAPER NUMBER

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/777,074	Applicant(s) KIM, NAM-IL	
	Examiner Pritham Prabhakher	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4 and 23-28 is/are rejected.
- 7) ☒ Claim(s) 2, 3 and 5-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :07/18/2005, 12/03/2004, 02/06/2007 and 05/14/2007.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 08/14/2007 have been fully considered but they are not persuasive.

1. In regard to independent **Claim 1**, the applicant alleges that Shibata et al. (US Pub No.: 2001/0004269) fails to teach or disclose a sensing unit disposed on at least one of the hinge unit and the fixing bracket to sense the relative rotational range of the hinge unit with respect to the fixing bracket. The examiner respectfully disagrees with this assertion.

Paragraph 0203 of Shibata et al. teaches that the rotation axis 32 (hinge unit) rotates about shutting axis 31 (fixing bracket). Also, as understood by the applicant and the examiner as evidenced by Page 9 of the remarks section, axial unit state sensor 55 of the portable terminal detects whether the main unit 10 and the flip unit are inwardly closed or opened. The axial unit state sensor 55 examines the state of the axial unit 30, which is attached to 31 (Figure 1), to detect the directions of the main unit 10 and the flip unit 20, **Paragraph 0209**. Therefore, in order to examine the state of the axial unit 30, upon which 31 is fixed, it is inherent that the sensor 55 is in contact with the fixing bracket to determine where the direction of the main unit 10 is with respect to the flip unit 20.

2. The rejections for claims 1, 4 and 23-25 will be repeated due to the reasons given above.

3. Applicant's argument, see Pages 10 and 11 of the remarks section, filed 08/14/2007, with respect to Claims 1-4, 8-9, 15-19 and 21 have been fully considered and are persuasive. However, since claim 1 is still rejected as discussed above, claims 2-3, 8-9, 15-19 and 21 will now instead be objected to as being dependent on a rejected claim but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 23-26 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Shibata et al. (US Pub No.: 20001/0004269A1)

*In regard to **Claim 1**, Shibata et al. teach of a hinge apparatus for rotatably connecting a housing (20 in Figure 1) with respect to a main body (10 in Figure 1) of an image photographing apparatus (Figure 1 shows the entire image photographing apparatus) providing rotation of the housing (Housing (flip unit 20) can rotate, **Figure 1 and Paragraph 0202**) in a predetermined rotation range, wherein the hinge apparatus comprises:*

*a fixing bracket secured to the main body (Shutting axis 31 (fixing bracket) is secured to the main body, **Figure 1 and Paragraphs 0202-0203**);*

*a hinge unit secured to the housing (A hinge unit is present that houses shaft 32, Figure 3), and connected to the fixing bracket to be reciprocatingly rotatable within a predetermined angle (Shaft 32 connects the hinge unit to the fixing bracket (31) and enables it to be rotatable within a predetermined range/angle, **Figures 1 and 3** and **Figure 14** shows the different angles it can be rotated) ;*

*a shaft member for rotatably connecting the hinge unit and the fixing bracket so that the hinge unit and the fixing bracket can rotate with respect to each other (Shaft (rotation axis 32) is present for connecting the hinge unit found on the housing 20 to the fixing bracket 31. This enables the hinge unit and the fixing bracket to rotate with respect to each other, **Paragraph 0203 and Figures 1-3**); and*

*a sensing unit (axial unit sensor 55) disposed on at least one of the hinge unit and the fixing bracket to sense the relative rotational range of the hinge unit with respect to the fixing bracket (Axial unit sensor 55 (sensing unit) is disposed in photographing apparatus that senses/detects the direction (rotational range) of the hinge unit found in the flip unit 20 and the fixing bracket found in the main unit 10, **Paragraph 0209**).*

*Regarding **Claim 23**, Shibata et al. teach of the hinge apparatus for rotatably connecting a housing with respect to a main body of an image photographing apparatus according to claim 1, wherein:*

*the image photographing apparatus comprises a first camera unit (Main body with the Photographic lens 33) and a second camera unit (Flip unit with the second photographic lens 23, **Paragraphs 0203 and 0205**); and*

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the fixing bracket (shutting axis 31), the hinge unit (part of the flip unit that houses the shaft), and the shaft member (rotation axis 32) for allowing rotational movement between the first and second camera unit (The main unit 10 and the flip unit 20 each have a camera housed in it. The main unit and flip unit are rotatable about each other).

*In regard to **Claim 24**, Shibata et al. teach of the hinge apparatus for rotatably connecting a housing with respect to a main body of an image photographing apparatus according to claim 23, wherein the first camera unit is a digital still camera (The first camera (lens 33) can be used to take still images, **Paragraph 0246**), and the second camera unit is a digital video camera (The second camera (lens 23) can be used to take moving images, **Paragraph 0246**).*

*With regard to **Claim 25**, Shibata et al. teach of the hinge apparatus for rotatably connecting a housing with respect to a main body of an image photographing apparatus according to claim 23, wherein the sensing unit determines one of a first operating mode that indicates a digital still camera mode, and a second operating mode that indicates a digital video camera mode (The sensing unit can detect what position the flip unit is in relation to the main body and automatically determine a mode/function to operate a digital still camera function or a digital video camera function, **Paragraphs 0248-0249**).*

*Regarding **Claim 26**, Shibata et al. disclose an image photographing apparatus, comprising:*

a main body (10 in Figure 1);

*a camera system comprising a first camera unit capturing a digital still image and a second camera unit capturing a digital video image (The first camera unit (unit with lens 33) can be used to take still images, **Paragraph 0246**. The second camera unit (unit with lens 23) can be used to take moving images, **Paragraph 0246**);*

*a hinge apparatus rotatably connecting the main body and the camera system (Hinge apparatus 30 in **Figure 3** is rotatable and connects the main body 10 and the camera system, **Figure 1,3 and 14**); and*

*a liquid crystal display (LCD) panel displaying the captured digital video image (LCD panel 21 is used to display captured video images, **Paragraphs 0194, 0217 and Figure 1**),*

*wherein the first camera unit and the second camera unit are turned on or off by rotation of the main body and the camera system (The first and second camera units can be made functional (on) or non-functional (off) depending on the orientation of the main body 10 and the entire camera system. The sensing unit can detect what position the flip unit is in relation to the main body and automatically determine a mode/function to operate a digital still camera function or a digital video camera function, **Paragraphs 0248-0249 and Figure 14**).*

Although not specifically disclosed, it is inherent that there is a signal delivery unit electrically connecting the main body and the camera system, because this would be necessary to have the units function together as a whole.

*In regard to **Claim 28**, Shibata et al. disclose the image photographing apparatus according to claim 26, further comprising a sensing unit sensing a rotational position of the main body and the camera system (The sensing unit can detect what position the flip unit is in with relation to the main body, **Paragraphs 0209 and 0248-0249**).*

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata et al. (US Pub No.: 2001/0004269A1) as applied to claims 1 and 26 above.

*With regard to **Claim 4**, Shibata et al. teach of the hinge apparatus for rotatably connecting a housing with respect to a main body of an image photographing apparatus according to claim 1, wherein the fixing bracket (shutting axis 31) further comprises:*

*the shaft member for rotatably connecting the hinge unit and the fixing bracket so that the hinge unit and the fixing bracket can rotate with respect to each other (**Paragraph 0203 and Figures 1-3**). However, Shibata et al. do not specifically teach of a shaft hole for receiving the shaft member. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a shaft hole into the*

fixing bracket to secure the shaft member because this is a common and well-known way of securing a shaft and a shaft hole would provide a secure placement of the shaft in the fixing bracket.

*Regarding **Claim 27**, Shibata et al. disclose the image photographing apparatus according to claim 26 as taught above. However, Shibata et al. do not teach or disclose a signal delivery unit that comprises a signal cable electrically connecting a digital still image signal and another signal cable electrically connecting a digital video image. It would have been obvious and well known to one of ordinary skill in the art at the time of the invention to incorporate separate signal cables for providing digital still image and digital video image signals, because this would ensure that at least one signal can be delivered in the event that one cable were to fail. This makes the system a more reliable system.*

Allowable Subject Matter

Claims 2-3 and 5-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pritham Prabhakher whose telephone number is 571-270-1128. The examiner can normally be reached on M-F (7:30-5:00) Alt Friday's Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571)272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Pritham . D. Prabhakher

A handwritten signature in black ink, appearing to read 'David Ometz', with a long horizontal line extending to the right.

DAVID OMETZ
SUPERVISORY PATENT EXAMINER